

### **REMARKS**

Claims 1-101, all the claims pending in the application, stand rejected. Applicants have amended independent claims 1, 2 and 17, and have cancelled claims 3-9, 12-16, 19, 22-26, 29-33, 36-40, 43, 46-50, 53-57, 60, 63-67, 70-74, 77, 80-84, 87-91, 94 and 97-101. Support for the amendments to claims 1, 2 and 17 appear in Paragraphs [0026] and [0028]. No new matter is added.

#### ***Drawings***

The Examiner objects to the drawings because the Examiner believes that they include reference characters that are not mentioned in the description. The Examiner points to the numerals 3, 4, 9, 10 and 14 as being missing from the description.

Applicants have amended paragraph 0081 to add the reference numerals to existing text, or to add text that would clearly describe the structure of the Figure, as would be understood to one skilled in the art. This same Figure appears in USP 6,743,743 cited by the Examiner. No new matter is added.

#### ***Specification***

The Examiner objects to the specification because in several places the disclosure refers to the claims. Applicant has deleted all identified reference to the claims from the specification.

#### ***Claim Rejections – 35 USC §112 ¶1***

**Claims 1-101 are rejected under 35 USC §112, first paragraph, as being non-enabling.** In particular, the Examiner states that the specification is enabling for specific molar percent ranges of the essential and optional components; however, it does not reasonable provide enablement for glass composition that do not have specified molar percentages for all the essential and optional components. The Examiner points to the disclosure at paragraphs 22-26, 28 and 30-33 for a listing of the molar percentages of the essential and optional components of the glass. This rejection is traversed for at least the following reasons.

First, as to claims 3-9, 12-16, 19, 22-26, 29-33, 36-40, 43, 46-50, 53-57, 60, 63-67, 70-74, 77, 80-84, 87-91, 94 and 97-101, the rejection is moot in view of the cancellation of the claims.

Second, as to the remaining claims, Applicants submit that a listing of all of the components is not required, and a listing of key components and their relative presence in the claimed glass is all that is needed to define the novel and unobvious invention.

***Claim Rejections – 35 USC §112 ¶2***

**Claims 1-6 and 17-19 are rejected under 35 USC §112, second paragraph, as being indefinite.** However, the Examiner does not specify a basis for rejection of these independent claims. Thus, Applicant has not been given adequate notice of the rejection such that it can be understood and either traversed or the claims otherwise amended. The rejection should be withdrawn.

**Claims 1-17, 19-41, 43-58, 60-75, 77-92 and 94-101 are rejected under 35 USC §112, second paragraph, as being indefinite.** The Examiner notes that independent claims 1-6, 17 and 19 recite the glass composition for certain components in terms of both weight and **molar** percentages. The Examiner finds that the mixture of weight percent and mole percentage ranges in the claims does not allow one skilled in the art to derive the ranges of the other essential and optional components and to understand the scope of the claims as a whole. This rejection is traversed for at least the following reasons.

The description of the various components is generally made according to molar percentages. However, Applicants note that at paragraph [0011], the same component is described at opposite ends of a range in terms of weight percent and molar percent (“Bi<sub>2</sub>O<sub>3</sub> exceeds 4 **weight** percent and is less than or equal to 15 **molar** percent”), and that some components of glass 1 are defined in terms of **molar** percent while others in glass 1-2 and 1-3 are defined in terms of **weight** percent. Similarly, at paragraph 17, Li<sub>2</sub>O in glass 2-1 is described as ranging from 4-25 **molar** percent (but exceeds 3 **weight** percent). The description of glass 2-3 at paragraph 19 is similar. See also paragraphs 49 and 50. The reason for the use of different units is to identify the two different ways the measurements can be made, for full and complete disclosure.

As to claims 3-9, 12-16, 19, 22-26, 29-33, 36-40, 43, 46-50, 53-57, 60, 63-67, 70-74, 77, 80-84, 87-91, 94 and 97-101, this rejection is moot in view of the cancellation of the claims.

With regard to independent claims 1, 2 and 17, the claims have been amended to use only molar percent as a unit of measure. Claims dependent from these claims now do not raise this issue. Thus, this rejection now should be overcome.

***Claim Rejections – 35 USC §103***

**Claims 1-101 are rejected under 35 USC §103(a) as being unpatentable over Hayashi et al (2002/0073735).** This rejection is traversed for at least the following reasons.

Again, as to claims 3-9, 12-16, 19, 22-26, 29-33, 36-40, 43, 46-50, 53-57, 60, 63-67, 70-74, 77, 80-84, 87-91, 94 and 97-101, the rejection is moot in view of the cancellation of those claims.

With regard to the remaining claims, Applicants note the Examiner's comments that Hayashi et al teaches at paragraphs 32 and 46-48 an optical glass composition having overlapping ranges of components with claims 1-6 and 17-19. The Examiner also notes that Hayashi et al teaches at paragraphs 30 and 48 a glass composition having overlapping ranges of refractive index and Abbe number. Finally, the Examiner notes that Hayashi et al teaches in paragraphs 2, 25-29 and 92-94 that the optical glass composition is used for precision press molded articles.

All of the remaining independent claims 1, 2, 17 and 18 expressly include a recitation of **Bi<sub>2</sub>O<sub>3</sub>** as an essential component. There is no teaching or suggestion in Hayashi et al that Bi<sub>2</sub>O<sub>3</sub> should be used. Reference to the Examples and Tables 1-6 in Hayashi et al confirms this observation. In the absence of this essential component, which acts in combination with the other recited essential components and optional components to produce the highly desired result described in the specification, there can be no prima facie case of obviousness.

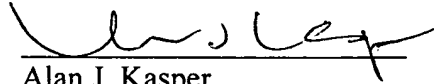
Thus, the rejection should be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.111  
U.S. Application No. 10/826,308

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Alan J. Kasper  
Registration No. 25,426

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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